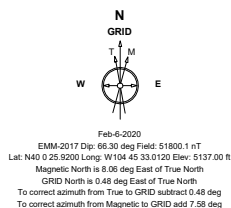


# Petro Operating Company

Location	Weld County, CO	Slot	Homestead 5
Field	Wattenberg	Well	Homestead 5
Installation	Homestead Pad - Rev 02	Wellbore	Homestead 5 (PWB)



Created by sean.dolfinger  
 Date plotted 12-Aug-2020  
 Plot reference is Homestead 5 (PWB).  
 Ref wellpath is Homestead 5 (PWP#1).  
 Coordinates are in Feet reference Homestead 5.  
 True Vertical Depths are reference Rig Datum.  
 Measured Depths are reference Rig Datum.  
 Rig Datum: Planned Datum #1  
 Rig Datum to Mean Sea Level: 5165.00 ft.  
 Plot North is aligned to GRID North.

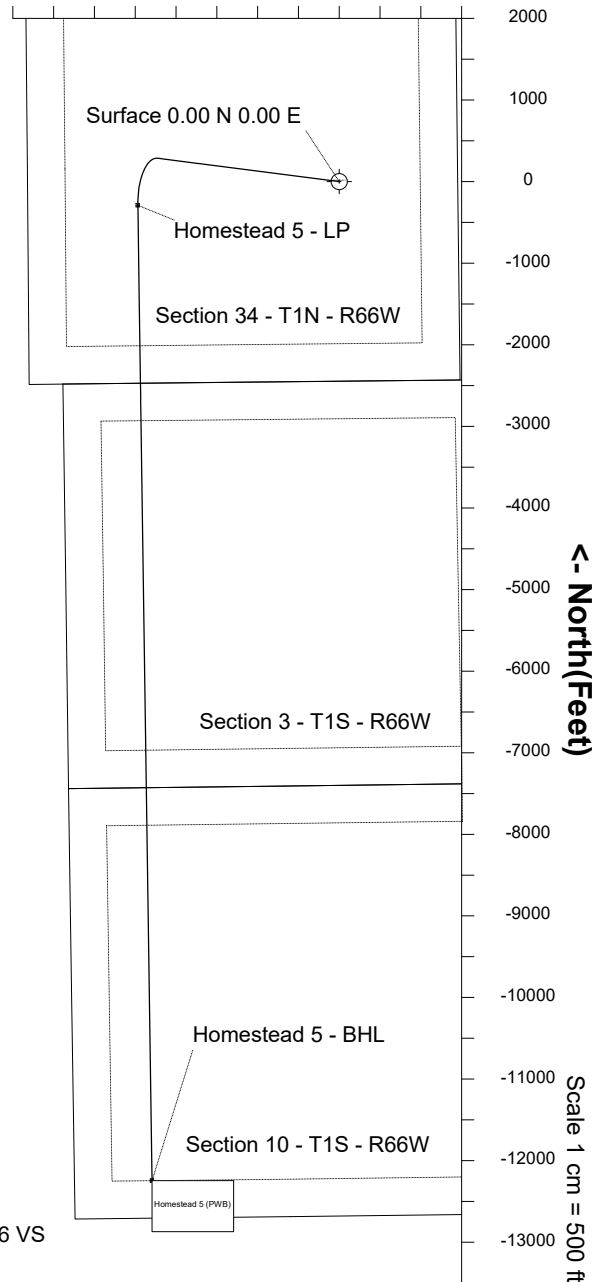
Scale 1 cm = 500 ft

East (Feet) ->

-4000 -3000 -2000 -1000 -0 1000

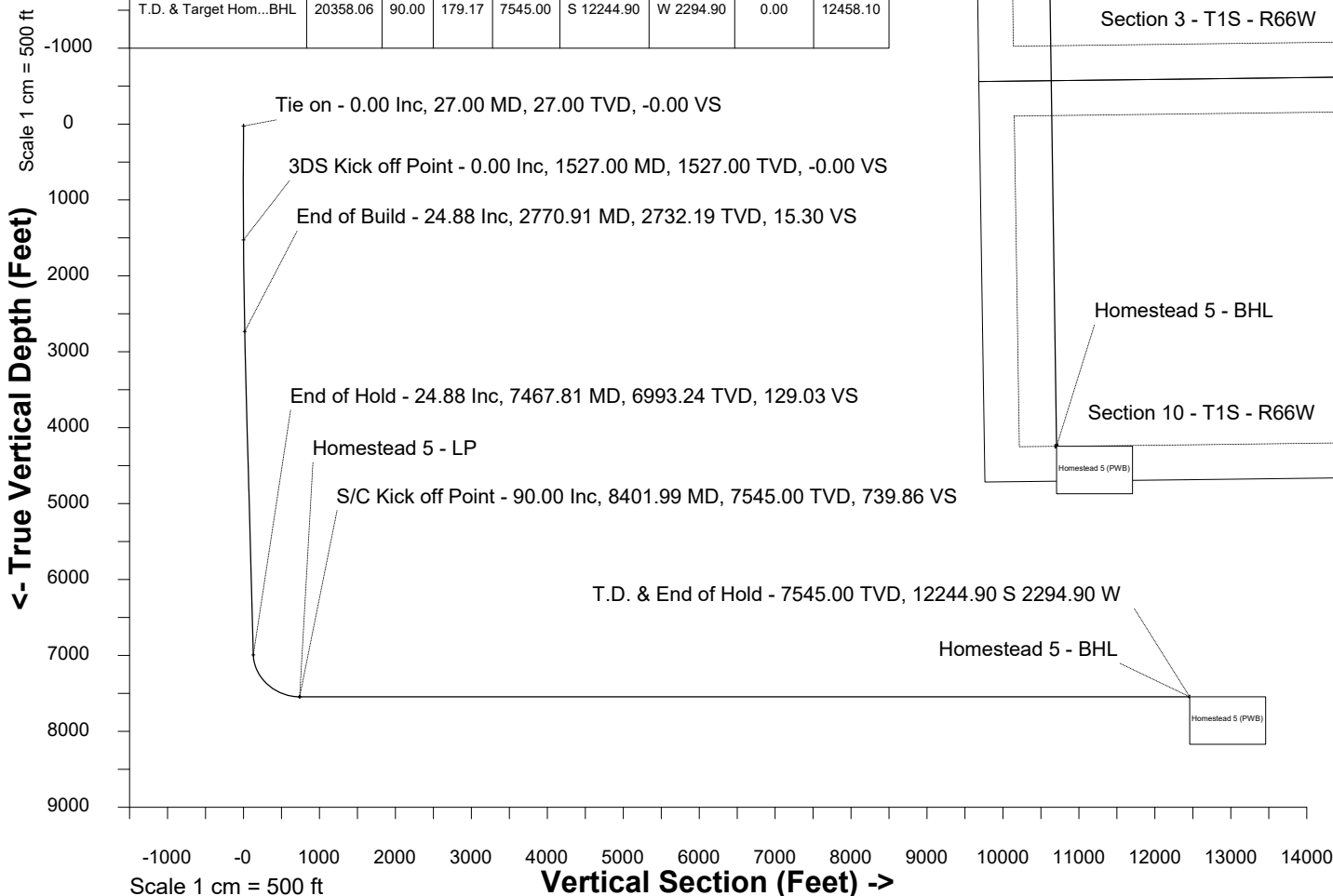
## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	27.00	0.00	0.00	27.00	S 0.00	W 0.00		-0.00
KOP	1527.00	0.00	277.32	1527.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2770.91	24.88	277.32	2732.19	N 33.85	W 263.68	2.00	15.30
End of Hold	7467.81	24.88	277.32	6993.24	N 285.47	W 2223.53	0.00	129.03
Target Homest...5 - LP	8401.99	90.00	179.17	7545.00	S 290.09	W 2468.48	10.00	739.86
T.D. & Target Hom...BHL	20358.06	90.00	179.17	7545.00	S 12244.90	W 2294.90	0.00	12458.10



Scale 1 cm = 500 ft

<- True Vertical Depth (Feet)



Vertical Section (Feet) ->

Azimuth 190.62 with reference 0.00 N, 0.00 E from Homestead 5

SYSDRILL  
Well Design Combined Report  
Wellbore: Homestead 5 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Homestead 5	40.00720000	-104.75905000	1246336.7544	3207555.4725	0.28N	33.61E	0.00

Declination		
Date	Source	Time
Feb-6-2020	EMM-2017	14:16

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Homestead Pad - Rev 02	40.00720000	-104.75917000	1246336.4735	3207521.8588	NAD83 Colorado State Planes, North Zone, US Foot	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
27.00	0.00	0.00	27.00	-5138.00	0.00N	0.00E		0.00
1527.00	0.00	277.32	1527.00	-3638.00	0.00N	0.00E	==>	0.00
2770.91	24.88	277.32	2732.19	-2432.81	33.85N	263.68W	2.00	15.30
7467.81	24.88	277.32	6993.24	1828.24	285.47N	2223.53W	==>	129.03
8401.99	90.00	179.17	7545.00	2380.00	290.09S	2468.48W	10.00	739.86
20358.06	90.00	179.17	7545.00	2380.00	12244.90S	2294.90W	==>	12458.10

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
0.00	0.00	0.00	0.00	0.00N	0.00E		0.00	40.00720000	-104.75905000
27.00	0.00	0.00	27.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1527.00	0.00	277.32	1527.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75905000
1627.00	2.00	277.32	1626.98	0.22N	1.73W	2.00	0.10	40.00720065	-104.75905617
1727.00	4.00	277.32	1726.84	0.89N	6.92W	2.00	0.40	40.00720260	-104.75907468
1827.00	6.00	277.32	1826.45	2.00N	15.57W	2.00	0.90	40.00720584	-104.75910550
1927.00	8.00	277.32	1925.70	3.55N	27.65W	2.00	1.60	40.00721038	-104.75914860
2027.00	10.00	277.32	2024.47	5.54N	43.17W	2.00	2.50	40.00721620	-104.75920393
2127.00	12.00	277.32	2122.62	7.97N	62.09W	2.00	3.60	40.00722331	-104.75927141
2227.00	14.00	277.32	2220.06	10.84N	84.40W	2.00	4.90	40.00723168	-104.75935096
2327.00	16.00	277.32	2316.64	14.13N	110.07W	2.00	6.39	40.00724132	-104.75944250
2427.00	18.00	277.32	2412.27	17.85N	139.07W	2.00	8.07	40.00725220	-104.75954590
2527.00	20.00	277.32	2506.82	22.00N	171.36W	2.00	9.94	40.00726432	-104.75966104
2627.00	22.00	277.32	2600.17	26.56N	206.90W	2.00	12.01	40.00727766	-104.75978777
2727.00	24.00	277.32	2692.21	31.54N	245.66W	2.00	14.26	40.00729221	-104.75992596
2770.91	24.88	277.32	2732.19	33.85N	263.68W	2.00	15.30	40.00729897	-104.75999021
2827.00	24.88	277.32	2783.08	36.86N	287.08W	==>	16.66	40.00730775	-104.76007366

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 5165.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 190.62 degrees  
Bottom hole distance is 12458.10 Feet on azimuth 190.62 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 12-Aug-2020

SYSDRILL  
Well Design Combined Report  
Wellbore: Homestead 5 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
2927.00	24.88	277.32	2873.80	42.21N	328.81W	==>	19.08	40.00732341	-104.76022245
3027.00	24.88	277.32	2964.52	47.57N	370.53W	==>	21.50	40.00733907	-104.76037124
3127.00	24.88	277.32	3055.24	52.93N	412.26W	==>	23.92	40.00735473	-104.76052003
3227.00	24.88	277.32	3145.96	58.29N	453.99W	==>	26.34	40.00737039	-104.76066881
3327.00	24.88	277.32	3236.68	63.64N	495.71W	==>	28.77	40.00738605	-104.76081760
3427.00	24.88	277.32	3327.40	69.00N	537.44W	==>	31.19	40.00740171	-104.76096639
3527.00	24.88	277.32	3418.12	74.36N	579.17W	==>	33.61	40.00741737	-104.76111518
3627.00	24.88	277.32	3508.84	79.71N	620.89W	==>	36.03	40.00743303	-104.76126397
3727.00	24.88	277.32	3599.56	85.07N	662.62W	==>	38.45	40.00744869	-104.76141275
3827.00	24.88	277.32	3690.28	90.43N	704.35W	==>	40.87	40.00746435	-104.76156154
3927.00	24.88	277.32	3781.00	95.79N	746.07W	==>	43.29	40.00748001	-104.76171033
4027.00	24.88	277.32	3871.72	101.14N	787.80W	==>	45.71	40.00749567	-104.76185912
4127.00	24.88	277.32	3962.44	106.50N	829.53W	==>	48.14	40.00751133	-104.76200791
4227.00	24.88	277.32	4053.16	111.86N	871.25W	==>	50.56	40.00752699	-104.76215670
4327.00	24.88	277.32	4143.88	117.21N	912.98W	==>	52.98	40.00754265	-104.76230548
4427.00	24.88	277.32	4234.60	122.57N	954.71W	==>	55.40	40.00755830	-104.76245427
4527.00	24.88	277.32	4325.32	127.93N	996.43W	==>	57.82	40.00757396	-104.76260306
4627.00	24.88	277.32	4416.04	133.28N	1038.16W	==>	60.24	40.00758962	-104.76275185
4727.00	24.88	277.32	4506.76	138.64N	1079.88W	==>	62.66	40.00760528	-104.76290064
4827.00	24.88	277.32	4597.48	144.00N	1121.61W	==>	65.09	40.00762093	-104.76304943
4927.00	24.88	277.32	4688.20	149.36N	1163.34W	==>	67.51	40.00763659	-104.76319822
5027.00	24.88	277.32	4778.92	154.71N	1205.06W	==>	69.93	40.00765225	-104.76334700
5127.00	24.88	277.32	4869.65	160.07N	1246.79W	==>	72.35	40.00766790	-104.76349579
5227.00	24.88	277.32	4960.37	165.43N	1288.52W	==>	74.77	40.00768356	-104.76364458
5327.00	24.88	277.32	5051.09	170.78N	1330.24W	==>	77.19	40.00769922	-104.76379337
5427.00	24.88	277.32	5141.81	176.14N	1371.97W	==>	79.61	40.00771487	-104.76394216
5527.00	24.88	277.32	5232.53	181.50N	1413.70W	==>	82.04	40.00773053	-104.76409095
5627.00	24.88	277.32	5323.25	186.86N	1455.42W	==>	84.46	40.00774618	-104.76423974
5727.00	24.88	277.32	5413.97	192.21N	1497.15W	==>	86.88	40.00776184	-104.76438853
5827.00	24.88	277.32	5504.69	197.57N	1538.88W	==>	89.30	40.00777749	-104.76453732
5927.00	24.88	277.32	5595.41	202.93N	1580.60W	==>	91.72	40.00779315	-104.76468611
6027.00	24.88	277.32	5686.13	208.28N	1622.33W	==>	94.14	40.00780880	-104.76483490
6127.00	24.88	277.32	5776.85	213.64N	1664.06W	==>	96.56	40.00782446	-104.76498369
6227.00	24.88	277.32	5867.57	219.00N	1705.78W	==>	98.98	40.00784011	-104.76513248
6327.00	24.88	277.32	5958.29	224.36N	1747.51W	==>	101.41	40.00785577	-104.76528127
6427.00	24.88	277.32	6049.01	229.71N	1789.24W	==>	103.83	40.00787142	-104.76543006
6527.00	24.88	277.32	6139.73	235.07N	1830.96W	==>	106.25	40.00788708	-104.76557885
6627.00	24.88	277.32	6230.45	240.43N	1872.69W	==>	108.67	40.00790273	-104.76572764
6727.00	24.88	277.32	6321.17	245.78N	1914.42W	==>	111.09	40.00791838	-104.76587643
6827.00	24.88	277.32	6411.89	251.14N	1956.14W	==>	113.51	40.00793404	-104.76602522
6927.00	24.88	277.32	6502.61	256.50N	1997.87W	==>	115.93	40.00794969	-104.76617401
7027.00	24.88	277.32	6593.33	261.86N	2039.60W	==>	118.36	40.00796534	-104.76632280
7127.00	24.88	277.32	6684.05	267.21N	2081.32W	==>	120.78	40.00798100	-104.76647159
7227.00	24.88	277.32	6774.77	272.57N	2123.05W	==>	123.20	40.00799665	-104.76662038
7327.00	24.88	277.32	6865.49	277.93N	2164.77W	==>	125.62	40.00801230	-104.76676917
7427.00	24.88	277.32	6956.22	283.28N	2206.50W	==>	128.04	40.00802795	-104.76691796
7467.81	24.88	277.32	6993.24	285.47N	2223.53W	==>	129.03	40.00803434	-104.76697868
7527.00	24.78	263.19	7047.01	285.58N	2248.22W	10.00	133.46	40.00803522	-104.76706680
7627.00	27.47	241.18	7137.00	271.95N	2289.33W	10.00	154.44	40.00799872	-104.76721397
7727.00	32.90	224.37	7223.56	241.34N	2328.63W	10.00	191.76	40.00791559	-104.76735514
7827.00	39.96	212.39	7304.07	194.69N	2364.91W	10.00	244.30	40.00778836	-104.76748604
7927.00	47.93	203.65	7376.08	133.42N	2397.08W	10.00	310.45	40.00762090	-104.76760268
8027.00	56.41	196.92	7437.40	59.38N	2424.16W	10.00	388.21	40.00741828	-104.76770151
8127.00	65.19	191.42	7486.17	25.17S	2445.32W	10.00	475.21	40.00718667	-104.76777954
8227.00	74.14	186.66	7520.90	117.66S	2459.92W	10.00	568.81	40.00693311	-104.76783440
8327.00	83.19	182.31	7540.55	215.29S	2467.52W	10.00	666.16	40.00666530	-104.76786440
8401.99	90.00	179.17	7545.00	290.09S	2468.48W	10.00	739.86	40.00646000	-104.76787003
8427.00	90.00	179.17	7545.00	315.09S	2468.12W	==>	764.37	40.00639135	-104.76786947

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Vertical Section is from 0.00N 0.00E on azimuth 190.62 degrees  
Bottom hole distance is 12458.10 Feet on azimuth 190.62 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 12-Aug-2020

SYSDRILL  
Well Design Combined Report  
Wellbore: Homestead 5 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
8527.00	90.00	179.17	7545.00	415.08S	2466.67W	==>	862.38	40.00611685	-104.76786724
8627.00	90.00	179.17	7545.00	515.07S	2465.21W	==>	960.39	40.00584234	-104.76786500
8727.00	90.00	179.17	7545.00	615.06S	2463.76W	==>	1058.40	40.00556784	-104.76786277
8827.00	90.00	179.17	7545.00	715.05S	2462.31W	==>	1156.41	40.00529334	-104.76786053
8927.00	90.00	179.17	7545.00	815.04S	2460.86W	==>	1254.42	40.00501883	-104.76785829
9027.00	90.00	179.17	7545.00	915.03S	2459.41W	==>	1352.43	40.00474433	-104.76785606
9127.00	90.00	179.17	7545.00	1015.02S	2457.96W	==>	1450.45	40.00446983	-104.76785382
9227.00	90.00	179.17	7545.00	1115.01S	2456.50W	==>	1548.46	40.00419532	-104.76785159
9327.00	90.00	179.17	7545.00	1215.00S	2455.05W	==>	1646.47	40.00392082	-104.76784935
9427.00	90.00	179.17	7545.00	1314.99S	2453.60W	==>	1744.48	40.00364632	-104.76784712
9527.00	90.00	179.17	7545.00	1414.98S	2452.15W	==>	1842.49	40.00337181	-104.76784488
9627.00	90.00	179.17	7545.00	1514.97S	2450.70W	==>	1940.50	40.00309731	-104.76784265
9727.00	90.00	179.17	7545.00	1614.96S	2449.24W	==>	2038.51	40.00282281	-104.76784041
9827.00	90.00	179.17	7545.00	1714.95S	2447.79W	==>	2136.52	40.00254830	-104.76783818
9927.00	90.00	179.17	7545.00	1814.93S	2446.34W	==>	2234.53	40.00227380	-104.76783594
10027.00	90.00	179.17	7545.00	1914.92S	2444.89W	==>	2332.54	40.00199930	-104.76783371
10127.00	90.00	179.17	7545.00	2014.91S	2443.44W	==>	2430.55	40.00172479	-104.76783147
10227.00	90.00	179.17	7545.00	2114.90S	2441.98W	==>	2528.56	40.00145029	-104.76782924
10327.00	90.00	179.17	7545.00	2214.89S	2440.53W	==>	2626.57	40.00117579	-104.76782700
10427.00	90.00	179.17	7545.00	2314.88S	2439.08W	==>	2724.58	40.00090128	-104.76782477
10527.00	90.00	179.17	7545.00	2414.87S	2437.63W	==>	2822.60	40.00062678	-104.76782253
10627.00	90.00	179.17	7545.00	2514.86S	2436.18W	==>	2920.61	40.00035228	-104.76782030
10727.00	90.00	179.17	7545.00	2614.85S	2434.73W	==>	3018.62	40.00007777	-104.76781806
10827.00	90.00	179.17	7545.00	2714.84S	2433.27W	==>	3116.63	39.99980327	-104.76781583
10927.00	90.00	179.17	7545.00	2814.83S	2431.82W	==>	3214.64	39.99952876	-104.76781359
11027.00	90.00	179.17	7545.00	2914.82S	2430.37W	==>	3312.65	39.99925426	-104.76781136
11127.00	90.00	179.17	7545.00	3014.81S	2428.92W	==>	3410.66	39.99897976	-104.76780912
11227.00	90.00	179.17	7545.00	3114.80S	2427.47W	==>	3508.67	39.99870525	-104.76780689
11327.00	90.00	179.17	7545.00	3214.79S	2426.01W	==>	3606.68	39.99843075	-104.76780465
11427.00	90.00	179.17	7545.00	3314.78S	2424.56W	==>	3704.69	39.99815625	-104.76780242
11527.00	90.00	179.17	7545.00	3414.77S	2423.11W	==>	3802.70	39.99788174	-104.76780018
11627.00	90.00	179.17	7545.00	3514.76S	2421.66W	==>	3900.71	39.99760724	-104.76779795
11727.00	90.00	179.17	7545.00	3614.74S	2420.21W	==>	3998.72	39.99733274	-104.76779571
11827.00	90.00	179.17	7545.00	3714.73S	2418.76W	==>	4096.74	39.99705823	-104.76779348
11927.00	90.00	179.17	7545.00	3814.72S	2417.30W	==>	4194.75	39.99678373	-104.76779124
12027.00	90.00	179.17	7545.00	3914.71S	2415.85W	==>	4292.76	39.99650923	-104.76778901
12127.00	90.00	179.17	7545.00	4014.70S	2414.40W	==>	4390.77	39.99623472	-104.76778677
12227.00	90.00	179.17	7545.00	4114.69S	2412.95W	==>	4488.78	39.99596022	-104.76778454
12327.00	90.00	179.17	7545.00	4214.68S	2411.50W	==>	4586.79	39.99568572	-104.76778230
12427.00	90.00	179.17	7545.00	4314.67S	2410.04W	==>	4684.80	39.99541121	-104.76778007
12527.00	90.00	179.17	7545.00	4414.66S	2408.59W	==>	4782.81	39.99513671	-104.76777783
12627.00	90.00	179.17	7545.00	4514.65S	2407.14W	==>	4880.82	39.99486221	-104.76777560
12727.00	90.00	179.17	7545.00	4614.64S	2405.69W	==>	4978.83	39.99458770	-104.76777336
12827.00	90.00	179.17	7545.00	4714.63S	2404.24W	==>	5076.84	39.99431320	-104.76777113
12927.00	90.00	179.17	7545.00	4814.62S	2402.79W	==>	5174.85	39.99403869	-104.76776889
13027.00	90.00	179.17	7545.00	4914.61S	2401.33W	==>	5272.86	39.99376419	-104.76776666
13127.00	90.00	179.17	7545.00	5014.60S	2399.88W	==>	5370.87	39.99348969	-104.76776443
13227.00	90.00	179.17	7545.00	5114.59S	2398.43W	==>	5468.89	39.99321518	-104.76776219
13327.00	90.00	179.17	7545.00	5214.58S	2396.98W	==>	5566.90	39.99294068	-104.76775996
13427.00	90.00	179.17	7545.00	5314.57S	2395.53W	==>	5664.91	39.99266618	-104.76775772
13527.00	90.00	179.17	7545.00	5414.56S	2394.07W	==>	5762.92	39.99239167	-104.76775549
13627.00	90.00	179.17	7545.00	5514.54S	2392.62W	==>	5860.93	39.99211717	-104.76775325
13727.00	90.00	179.17	7545.00	5614.53S	2391.17W	==>	5958.94	39.99184267	-104.76775102
13827.00	90.00	179.17	7545.00	5714.52S	2389.72W	==>	6056.95	39.99156816	-104.76774878
13927.00	90.00	179.17	7545.00	5814.51S	2388.27W	==>	6154.96	39.99129366	-104.76774655
14027.00	90.00	179.17	7545.00	5914.50S	2386.82W	==>	6252.97	39.99101916	-104.76774431
14127.00	90.00	179.17	7545.00	6014.49S	2385.36W	==>	6350.98	39.99074465	-104.76774208
14227.00	90.00	179.17	7545.00	6114.48S	2383.91W	==>	6448.99	39.99047015	-104.76773985
14327.00	90.00	179.17	7545.00	6214.47S	2382.46W	==>	6547.00	39.99019564	-104.76773761

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Bottom hole distance is 12458.10 Feet on azimuth 190.62 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 12-Aug-2020

SYSDRILL  
Well Design Combined Report  
Wellbore: Homestead 5 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
14427.00	90.00	179.17	7545.00	6314.46S	2381.01W	==>	6645.01	39.98992114	-104.76773538
14527.00	90.00	179.17	7545.00	6414.45S	2379.56W	==>	6743.03	39.98964664	-104.76773314
14627.00	90.00	179.17	7545.00	6514.44S	2378.10W	==>	6841.04	39.98937213	-104.76773091
14727.00	90.00	179.17	7545.00	6614.43S	2376.65W	==>	6939.05	39.98909763	-104.76772867
14827.00	90.00	179.17	7545.00	6714.42S	2375.20W	==>	7037.06	39.98882313	-104.76772644
14927.00	90.00	179.17	7545.00	6814.41S	2373.75W	==>	7135.07	39.98854862	-104.76772421
15027.00	90.00	179.17	7545.00	6914.40S	2372.30W	==>	7233.08	39.98827412	-104.76772197
15127.00	90.00	179.17	7545.00	7014.39S	2370.85W	==>	7331.09	39.98799961	-104.76771974
15227.00	90.00	179.17	7545.00	7114.38S	2369.39W	==>	7429.10	39.98772511	-104.76771750
15327.00	90.00	179.17	7545.00	7214.37S	2367.94W	==>	7527.11	39.98745061	-104.76771527
15427.00	90.00	179.17	7545.00	7314.35S	2366.49W	==>	7625.12	39.98717610	-104.76771303
15527.00	90.00	179.17	7545.00	7414.34S	2365.04W	==>	7723.13	39.98690160	-104.76771080
15627.00	90.00	179.17	7545.00	7514.33S	2363.59W	==>	7821.14	39.98662710	-104.76770857
15727.00	90.00	179.17	7545.00	7614.32S	2362.13W	==>	7919.15	39.98635259	-104.76770633
15827.00	90.00	179.17	7545.00	7714.31S	2360.68W	==>	8017.16	39.98607809	-104.76770410
15927.00	90.00	179.17	7545.00	7814.30S	2359.23W	==>	8115.18	39.98580358	-104.76770186
16027.00	90.00	179.17	7545.00	7914.29S	2357.78W	==>	8213.19	39.98552908	-104.76769963
16127.00	90.00	179.17	7545.00	8014.28S	2356.33W	==>	8311.20	39.98525458	-104.76769740
16227.00	90.00	179.17	7545.00	8114.27S	2354.88W	==>	8409.21	39.98498007	-104.76769516
16327.00	90.00	179.17	7545.00	8214.26S	2353.42W	==>	8507.22	39.98470557	-104.76769293
16427.00	90.00	179.17	7545.00	8314.25S	2351.97W	==>	8605.23	39.98443107	-104.76769069
16527.00	90.00	179.17	7545.00	8414.24S	2350.52W	==>	8703.24	39.98415656	-104.76768846
16627.00	90.00	179.17	7545.00	8514.23S	2349.07W	==>	8801.25	39.98388206	-104.76768623
16727.00	90.00	179.17	7545.00	8614.22S	2347.62W	==>	8899.26	39.98360755	-104.76768399
16827.00	90.00	179.17	7545.00	8714.21S	2346.16W	==>	8997.27	39.98333305	-104.76768176
16927.00	90.00	179.17	7545.00	8814.20S	2344.71W	==>	9095.28	39.98305855	-104.76767952
17027.00	90.00	179.17	7545.00	8914.19S	2343.26W	==>	9193.29	39.98278404	-104.76767729
17127.00	90.00	179.17	7545.00	9014.18S	2341.81W	==>	9291.30	39.98250954	-104.76767506
17227.00	90.00	179.17	7545.00	9114.17S	2340.36W	==>	9389.32	39.98223503	-104.76767282
17327.00	90.00	179.17	7545.00	9214.15S	2338.91W	==>	9487.33	39.98196053	-104.76767059
17427.00	90.00	179.17	7545.00	9314.14S	2337.45W	==>	9585.34	39.98168603	-104.76766835
17527.00	90.00	179.17	7545.00	9414.13S	2336.00W	==>	9683.35	39.98141152	-104.76766612
17627.00	90.00	179.17	7545.00	9514.12S	2334.55W	==>	9781.36	39.98113702	-104.76766389
17727.00	90.00	179.17	7545.00	9614.11S	2333.10W	==>	9879.37	39.98086252	-104.76766165
17827.00	90.00	179.17	7545.00	9714.10S	2331.65W	==>	9977.38	39.98058801	-104.76765942
17927.00	90.00	179.17	7545.00	9814.09S	2330.19W	==>	10075.39	39.98031351	-104.76765718
18027.00	90.00	179.17	7545.00	9914.08S	2328.74W	==>	10173.40	39.98003900	-104.76765495
18127.00	90.00	179.17	7545.00	10014.07S	2327.29W	==>	10271.41	39.97976450	-104.76765272
18227.00	90.00	179.17	7545.00	10114.06S	2325.84W	==>	10369.42	39.97949000	-104.76765048
18327.00	90.00	179.17	7545.00	10214.05S	2324.39W	==>	10467.43	39.97921549	-104.76764825
18427.00	90.00	179.17	7545.00	10314.04S	2322.94W	==>	10565.44	39.97894099	-104.76764602
18527.00	90.00	179.17	7545.00	10414.03S	2321.48W	==>	10663.46	39.97866648	-104.76764378
18627.00	90.00	179.17	7545.00	10514.02S	2320.03W	==>	10761.47	39.97839198	-104.76764155
18727.00	90.00	179.17	7545.00	10614.01S	2318.58W	==>	10859.48	39.97811748	-104.76763932
18827.00	90.00	179.17	7545.00	10714.00S	2317.13W	==>	10957.49	39.97784297	-104.76763708
18927.00	90.00	179.17	7545.00	10813.99S	2315.68W	==>	11055.50	39.97756847	-104.76763485
19027.00	90.00	179.17	7545.00	10913.98S	2314.22W	==>	11153.51	39.97729396	-104.76763261
19127.00	90.00	179.17	7545.00	11013.96S	2312.77W	==>	11251.52	39.97701946	-104.76763038
19227.00	90.00	179.17	7545.00	11113.95S	2311.32W	==>	11349.53	39.97674496	-104.76762815
19327.00	90.00	179.17	7545.00	11213.94S	2309.87W	==>	11447.54	39.97647045	-104.76762591
19427.00	90.00	179.17	7545.00	11313.93S	2308.42W	==>	11545.55	39.97619595	-104.76762368
19527.00	90.00	179.17	7545.00	11413.92S	2306.97W	==>	11643.56	39.97592144	-104.76762145
19627.00	90.00	179.17	7545.00	11513.91S	2305.51W	==>	11741.57	39.97564694	-104.76761921
19727.00	90.00	179.17	7545.00	11613.90S	2304.06W	==>	11839.58	39.97537244	-104.76761698
19827.00	90.00	179.17	7545.00	11713.89S	2302.61W	==>	11937.59	39.97509793	-104.76761475
19927.00	90.00	179.17	7545.00	11813.88S	2301.16W	==>	12035.61	39.97482343	-104.76761251
20027.00	90.00	179.17	7545.00	11913.87S	2299.71W	==>	12133.62	39.97454892	-104.76761028
20127.00	90.00	179.17	7545.00	12013.86S	2298.25W	==>	12231.63	39.97427442	-104.76760805

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Prepared by  
Date Printed: 12-Aug-2020

SYSDRILL  
Well Design Combined Report  
Wellbore: Homestead 5 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
20227.00	90.00	179.17	7545.00	12113.85S	2296.80W	==>	12329.64	39.97399991	-104.76760581
20327.00	90.00	179.17	7545.00	12213.84S	2295.35W	==>	12427.65	39.97372541	-104.76760358
20358.06	90.00	179.17	7545.00	12244.90S	2294.90W	==>	12458.10	39.97364014	-104.76760289

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Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Homestead 5 - BHL	12244.90S	2294.90W	7545.00	39.97364014	-104.76760289	1234092.30	3205260.66
Homestead 5 - LP	290.09S	2468.48W	7545.00	40.00646000	-104.76787003	1246046.68	3205087.08

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
925962	Planned	1527.00	1527.00	WdW Rate Gyro	Standard	
925961	Planned	20358.06	7545.00	ISCWSA MWD	Rev 4 + SAG + FLT	

Notes

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